

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Low Switching Losses and High Efficiency
- Low Reverse Leakage
- Ultrafast Recovery Time
- Planar Structure Die and Soft Recovery Characteristics

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 4°C/W Junction to Case

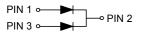
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	DMC	Maximum DC Blocking Voltage
MURS1040FCTA	MURS1040FCTA	400V	280V	400V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

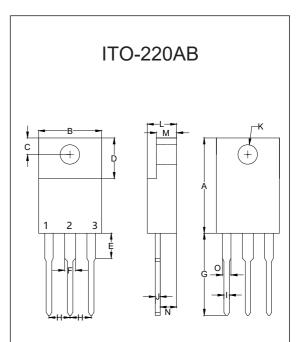
Average Rectified Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> = 100°C
Peak Forward Surge Current	I <sub>FSM</sub>	70A	8.3ms,Half Sine
Instantaneous Forward Voltage	V <sub>F</sub>	1.08V(Typ) 1.25V(Max) 1.05V(Max)	I <sub>F</sub> =5A; T <sub>J</sub> =25°C I <sub>F</sub> =5A; T <sub>J</sub> =25°C I <sub>F</sub> =5A; T <sub>J</sub> =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 50μΑ	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	35ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>RR</sub> =0.25A
Typical Junction Capacitance	CJ	35pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

#### Internal Structure



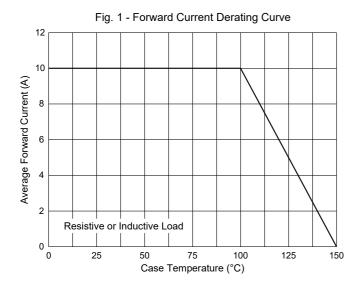
# 10 Amp FRED Rectifiers 400 Volts

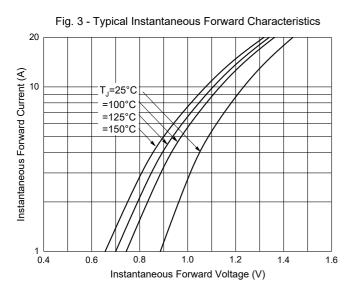


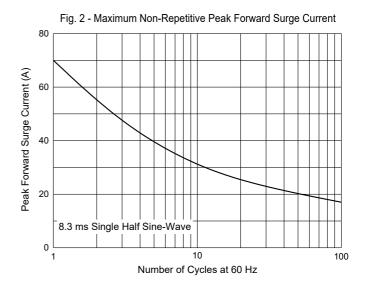
DIMENSIONS					
	INCHES		MM		NOTE
DIM	MIN MAX		MIN MAX		
Α	0.567	0.642	14.40	16.30	
В		0.421		10.70	
С	0.085	0.128	2.15	3.25	
D	0.248	0.272	6.30	6.90	
E		0.177		4.50	
F		0.071		1.80	
G	0.500	0.539	12.70	14.20	
Н	0.100		2.55		
I		0.035		0.90	
J		0.032		0.80	
K	0.102	0.150	2.60	3.80	Ф
L		0.201		5.10	
М		0.140		3.56	
N	0.083	0.126	2.10	3.20	
0		0.071		1.80	

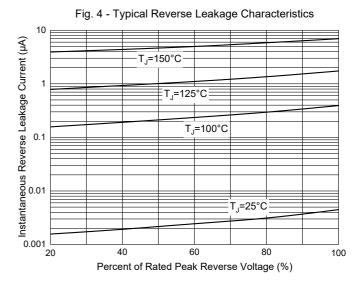


### **Curve Characteristics**









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## **Ordering Information**

Device	Packing		
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton		

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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